

What is claimed is:

1. A food substance useful for lowering the cholesterol levels in blood serum, said substance comprising a fatty acid ester of  $\beta$ -sitostanol.
2. The food substance of claim 1 wherein the fatty acid ester comprises a fatty acid or a mixture of fatty acids containing between about 2 and about 22 carbon atoms.
3. The food substance according to claim 2 produced by esterification of  $\beta$ -sitostanol and fatty acid ester in a solvent-free food grade process.
4. The food substance according to claim 3 prepared by the interesterification of the  $\beta$ -sitostanol with a fatty acid ester in the presence of an esterification catalyst.
5. The food substance produced according to claim 4 wherein said catalyst comprises sodium ethylate.
6. A fatty acid ester of sitostanol, said ester being soluble in fats prepared by the esterification of free  $\beta$ -sitostanol with a fatty acid ester in a solvent-free food grade process.
7. The fatty acid ester of claim 6 wherein the ester is prepared in the presence of an interesterification catalyst.

8. The fatty acid ester of claim 7 wherein the catalyst comprises sodium ethylate.

9. The fatty acid ester of claim 7 wherein esterification is carried out at a temperature of between about 90° C and 120° C under a vacuum of between about 5 and about 15 mmHg.

10. A process of preparing a fat soluble substance useful for lowering the cholesterol levels in blood serum, said process comprising the interesterification of  $\beta$ -sitostanol and a fatty acid ester in a solvent-free food grade process to produce a  $\beta$ -sitostanol fatty acid ester.

11. The process according to claim 10 wherein the fatty acid ester comprises a fatty acid or a mixture of fatty acids containing between about 2 and about 22 carbon atoms.

12. The process according to claim 11 wherein the interesterification between the  $\beta$ -sitostanol and the fatty acid ester is carried out at a temperature of between about 90° C and about 120° C and under a vacuum of about 5 and about 15 mmHg.

13. The process of claim 12 wherein the interesterification of the  $\beta$ -sitostanol and the fatty acid ester is carried out in the presence of an interesterification catalyst.

14. The process according to claim 13 wherein the catalyst consists essentially of sodium ethylate.

15. The process of claim 11 wherein the interesterification is carried out between free  $\beta$ -sitostanols and fatty acid esters only without the presence of other interesterifiable lipids.

16. In combination with an edible food as a source of cholesterol, an amount effective for reducing the absorption of cholesterol into blood serum from the intestines of a fatty acid ester of  $\beta$ -sitostanol.

17. In the combination according to claim 16, an effective amount being within the range of between about 0.2 g/day and about 20 g/day of the  $\beta$ -sitostanol fatty acid ester.

18. In the combination according to claim 17, said edible food being selected from the group consisting of cooking oils, margarines, butter, mayonnaise, salad dressings, shortenings, and other foods having an essential fat component.

19. In the combination of claim 16, said ester comprising a fat soluble ester.

20. In the combination of claim 16, said ester being prepared by a process comprising the esterification of a  $\beta$ -sitostanol with a fatty acid ester in the presence of an excess of said ester, wherein said esterification occurs in the presence of a catalyst at a temperature of between about

90° C and about 120° C and under a vacuum of about 5 and about 15 mmHg.

21. The method of reducing the absorption of cholesterol into the blood stream comprising orally introducing into the body an effective amount of the food substance of claim 1.

22. The method according to claim 21 wherein the effective amount of the food substance orally introduced is between about 0.2 grams and about 20 grams per day.